The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A method for cloning a polymerase chain reaction (PCR) product into a target sequence, comprising transferring a PCR product into a target sequence using a site-specific recombination system *in vivo*.

2. The method of Claim 1, wherein the transfer of the PCR product into the target sequence comprises the steps of:

providing a PCR product flanked by a first site-specific recombination site and a second site-specific recombination site; and

transferring the PCR product into a cell comprising a target sequence flanked by a first recombination site partner and a second recombination site partner and at least one recombination protein that mediates recombination between the first site-specific recombination site and the first recombination site partner and between the second site-specific recombination site and the second recombination site partner.

3. The method of Claim 1, wherein the target sequence is a plasmid sequence.

4. The method of Claim 1, wherein the target sequence is a genomic sequence.

5. The method of Claim 2, wherein the PCR product is generated using a set of primers to provide the first and second recombination sites to the PCR product.

6. The method of Claim 2, wherein the target sequence is transferred into the cell simultaneously with the PCR product.

7. The method of Claim 1, wherein the site-specific recombination system is the integrase/att system from bacteriophage lambda.

8. The method of Claim 2, wherein the cell is a bacterial cell.

9. The method of Claim 7, wherein the bacterial cell is an *E. coli* cell.

10. The method of Claim 2, wherein at least one of the recombination proteins comprises lambda integrase.

11. The method of Claim 10, wherein at least one of the recombination proteins comprises Integration Host Factor.

12. The method of Claim 11, wherein Integration Host Factor is present in the cell in early growth phase.

13. The method of Claim 4, wherein the first site-specific recombination site is *attB1* site, wherein the second site-specific recombination site is an *attB2* site, wherein the first recombination site partner is an *attP1* site, and wherein the second recombination site partner is an *attP2* site.

14. The method of Claim 1, wherein the PCR product is linear.

15. The method of Claim 1, wherein the PCR product is cloned without purification from the PCR reaction.